VisionLink RCX Extender Pair: Base Mode Configuration

Each VisionLink RCX unit comes with factory presets, as well as the ability to reset them. For a quick start, see Figure 1 and follow the steps below. For complete documentation of EDT extenders and framegrabbers, see edt.com.



Step 1 – Verify presets. On each unit's factory preset label (circled in Figure 1 above), find "Blink Code X-Y."

"X" is the device to which the unit connects (1 for camera, 2 for framegrabber); Y is the link rate between units. The camera's output pixel clock rate must fall within this range.

Table 1 below shows blink codes for standard usage (left side of table) and RCX C-Link emulation (right side of table). If you are using a VisionLink RCX with an RCX C-Link, then blink codes *X*-1 and *X*-4 are compatible with existing RCX C-Links in matching blink codes.

Table 1:	Blink codes for standard usage				Blink codes for RCX C-Link emulation				
Unit	Code	Pixel	Bits per	Link rate	Co	ode	Pixel	Bits per	Link rate
connects to	(X-Y)	clock rate	clock	between units	(X	-Y)	clock rate	clock	between units
camera	1-1	20–40 MHz	8–24	1.25 Gb/s	3-	1-1	20–40 MHz	8–24	1.25 Gb/s
camera	1-2	20–80 MHz	8–24	2.50 Gb/s	3-	1-2	20–60 MHz	8–16	1.25 Gb/s
camera	1-3	20–85 MHz	8–24	3.00 Gb/s	3-	1-3	20–60 MHz	8–24	2.50 Gb/s
camera	1-4	20–80 MHz	8–24	2.50 Gb/s	3-	1-4	60–80 MHz	8–24	2.50 Gb/s
framegrabber	2-1	40 MHz	8–24	1.25 Gb/s	3-2	2-1	40 MHz	8–24	1.25 Gb/s
framegrabber	2-2	80 MHz	8–24	2.50 Gb/s	3-2	2-2	60 MHz	8–16	1.25 Gb/s
framegrabber	2-3	85 MHz	8–24	3.00 Gb/s	3-2	2-3	60 MHz	8–24	2.50 Gb/s
framegrabber	2-4	80 MHz	8–24	2.50 Gb/s	3-2	2-4	80 MHz	8–24	2.50 Gb/s

Each extender unit must be used as its settings dictate. Data will not transfer if a unit is plugged into the wrong device (i.e., a camera-end unit into a framegrabber, or a framegrabber-end unit into a camera); if the camera's pixel clock rate falls outside the preset range; or if the pixel clock rate and the link rate for the two VisionLink RCX units do not match. In such cases you must reset and relabel each unit. For details, see the user's guide and video tutorial (edt.com/vision).

- Step 2 With all power off, connect all devices. Connect the camera-end extender unit to the camera; the framegrabber-end unit to the framegrabber; the cabling between the two units; and lastly, the units to the power supply.
- Step 3 Power on all devices. In any order, power on all cameras, computers, and RCX units. Each unit's LED (circled in Figure 1) should blink briefly, then stay steady green; if not, see the VisionLink RCX user's guide for troubleshooting.